

**TRAFFIC
SAFETY and
YOU !!!!!**





Motor Vehicle Safety

In the US nearly 105
people are killed EVERY
DAY in a Vehicle. More
than 600,000 people
ages 15 to 20 were
injured in traffic

US ARMY

Fatal Factors in FY 2003 POV Traffic Deaths

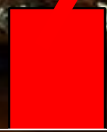
%
of
Mishaps

100
75
50
25
0

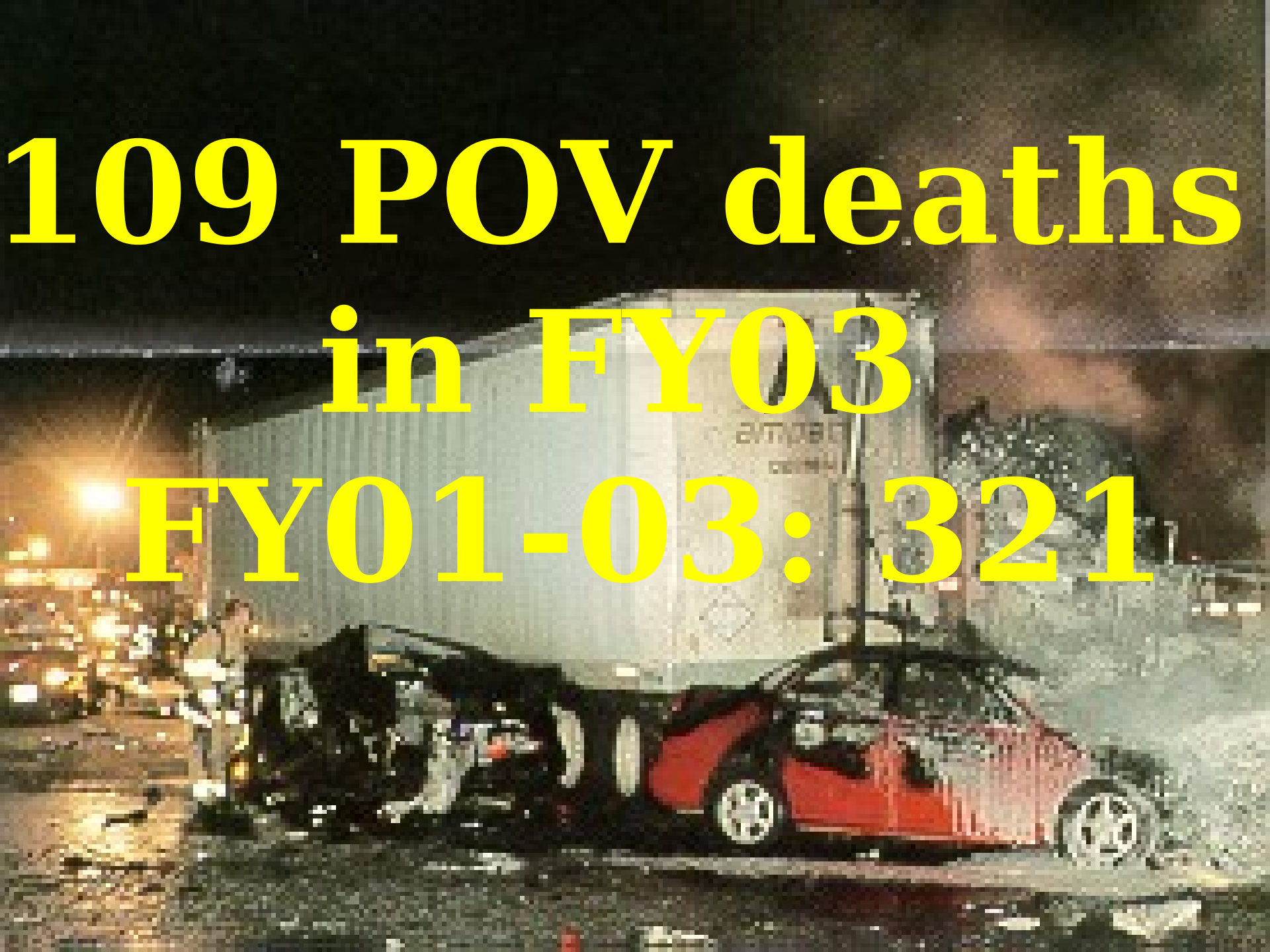
No Seat Belt

Alcohol

Speeding

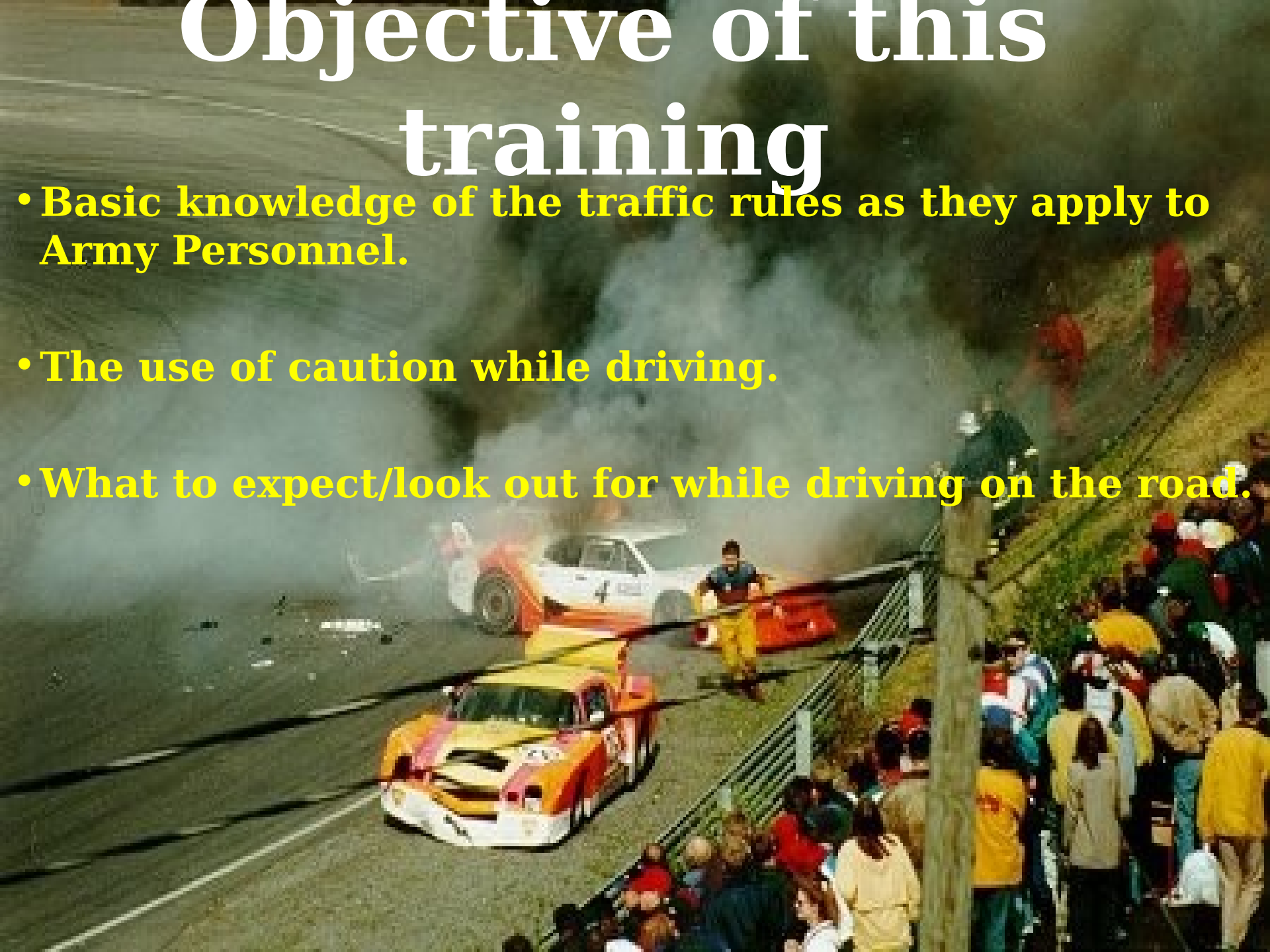


**109 POV deaths
in FY03
FY01-03: 321**



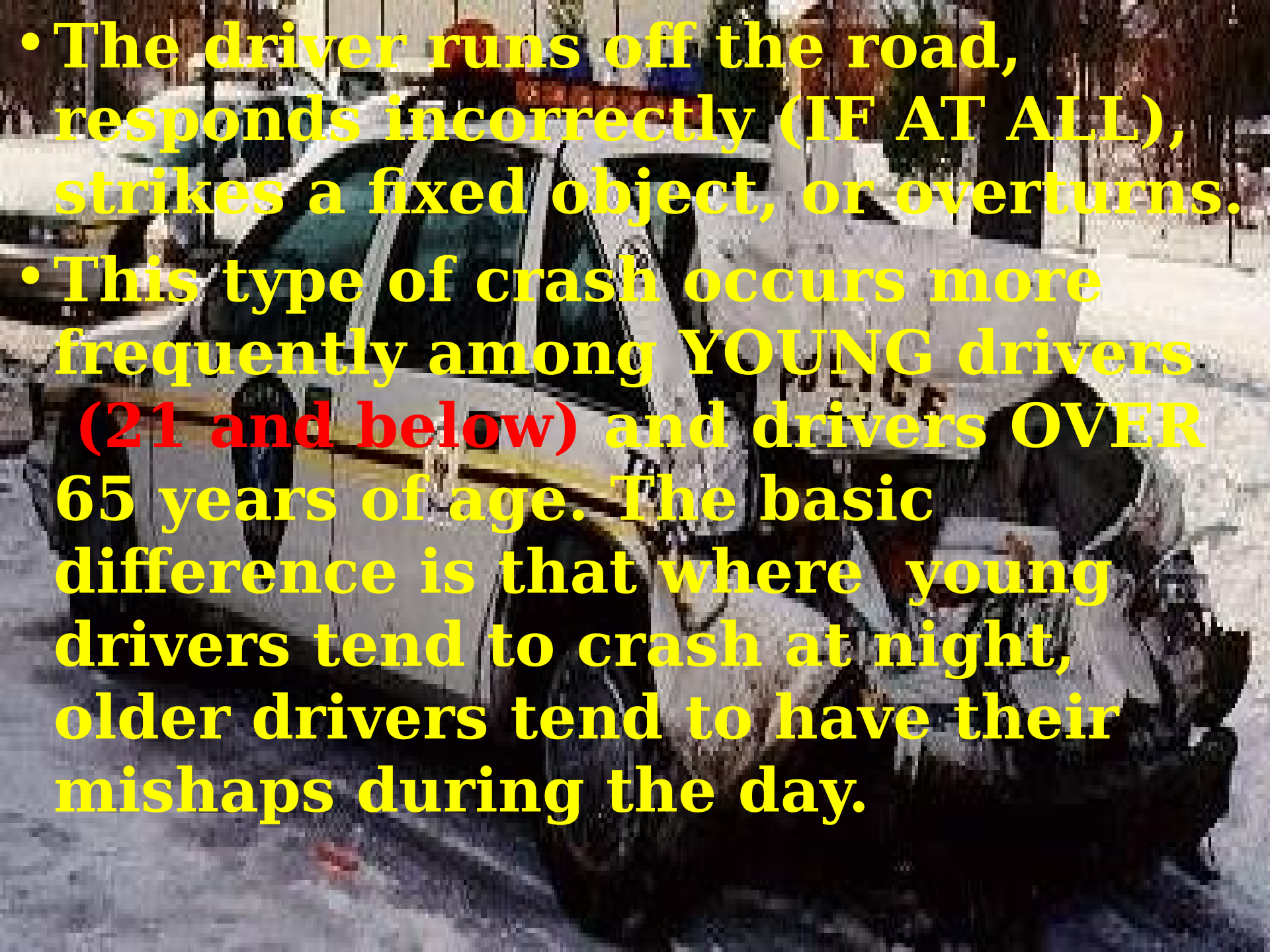
Objective of this training

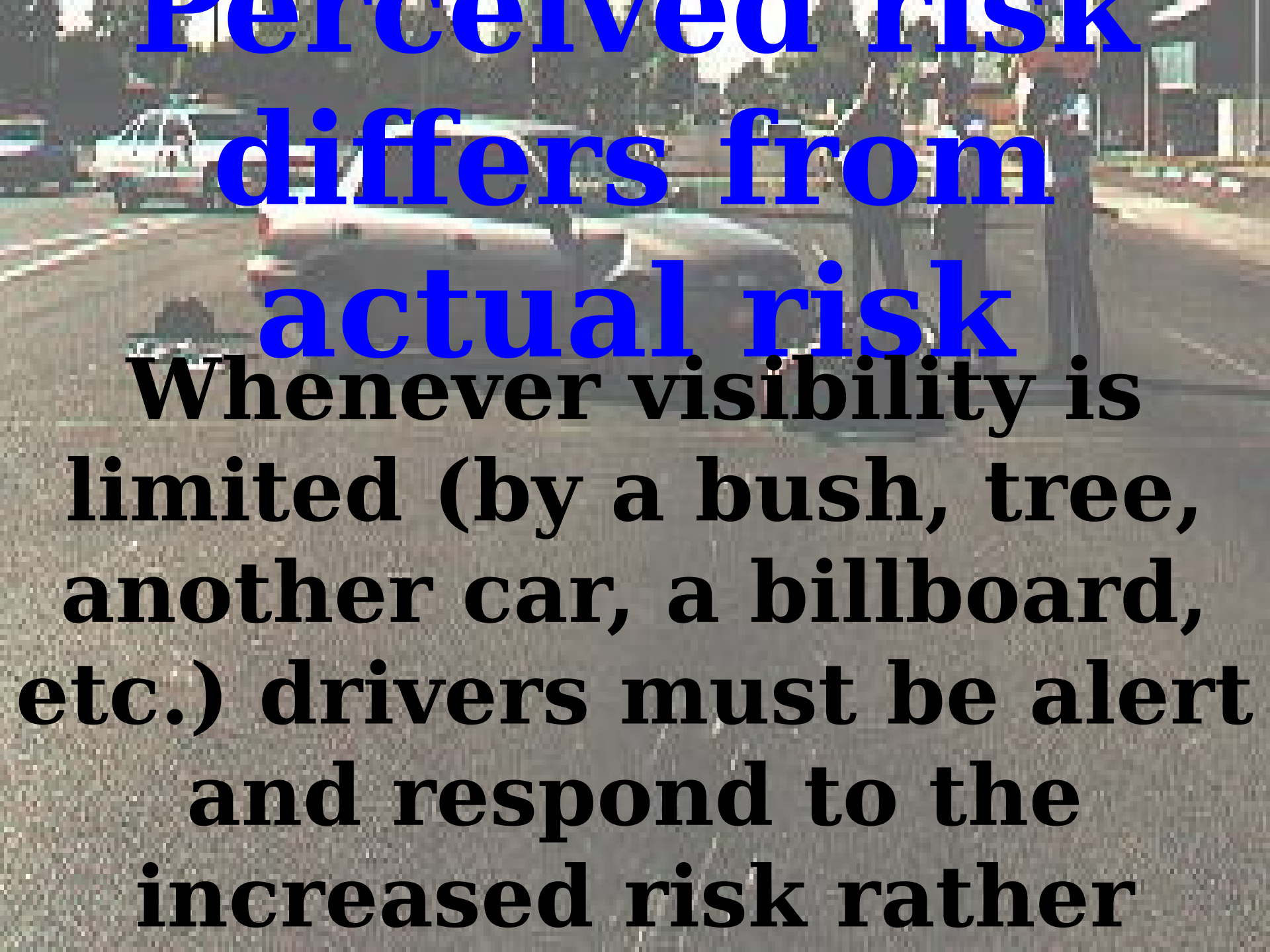
- **Basic knowledge of the traffic rules as they apply to Army Personnel.**
- **The use of caution while driving.**
- **What to expect/look out for while driving on the road.**



Introduction

- **Risk is always present:**
 - Approximately 50 percent of ALL vehicle-occupant fatalities involve SINGLE-vehicle crashes, most of which occur on relatively straight roadways.

- 
- A photograph of a car accident scene. A white sedan is involved in a collision, with its front end crumpled and its hood and front bumper crumpled. The car is parked on a paved surface. In the background, there are trees and a building. The text is overlaid on the image in a large, bold, yellow font. The text is arranged in two bullet points. The first bullet point describes a crash where the driver runs off the road, responds incorrectly, strikes a fixed object, or overturns. The second bullet point states that this type of crash occurs more frequently among young drivers (21 and below) and drivers over 65 years of age. It also notes that young drivers tend to crash at night, while older drivers tend to have mishaps during the day.
- The driver runs off the road, responds incorrectly (IF AT ALL), strikes a fixed object, or overturns.
 - This type of crash occurs more frequently among YOUNG drivers (21 and below) and drivers OVER 65 years of age. The basic difference is that where young drivers tend to crash at night, older drivers tend to have their mishaps during the day.

A background image of a busy street scene. In the foreground, a white car is partially visible. In the background, there are other cars, including a red one, and several pedestrians walking on the sidewalk. The scene is slightly blurred, suggesting motion or a shallow depth of field.

Perceived risk differs from actual risk

Whenever visibility is limited (by a bush, tree, another car, a billboard, etc.) drivers must be alert and respond to the increased risk rather

RISK IS Shared

- It's important to remember that actions of ALL roadway users (pedestrians, animals, bicyclists, or drivers).

– AFFECT ALL OTHER USERS



What are the shared costs?

- The costs resulting from any collision are not restricted to persons who fail to take safety precautions.




Some shared costs from bad drivers:

- HIGH MEDICAL COSTS
- REHABILITATION COSTS
- INSURANCE PREMIUMS
- INCREASED TAXES
- FAMILY DISTRESS
- UNPAID BILLS



RISK can be altered

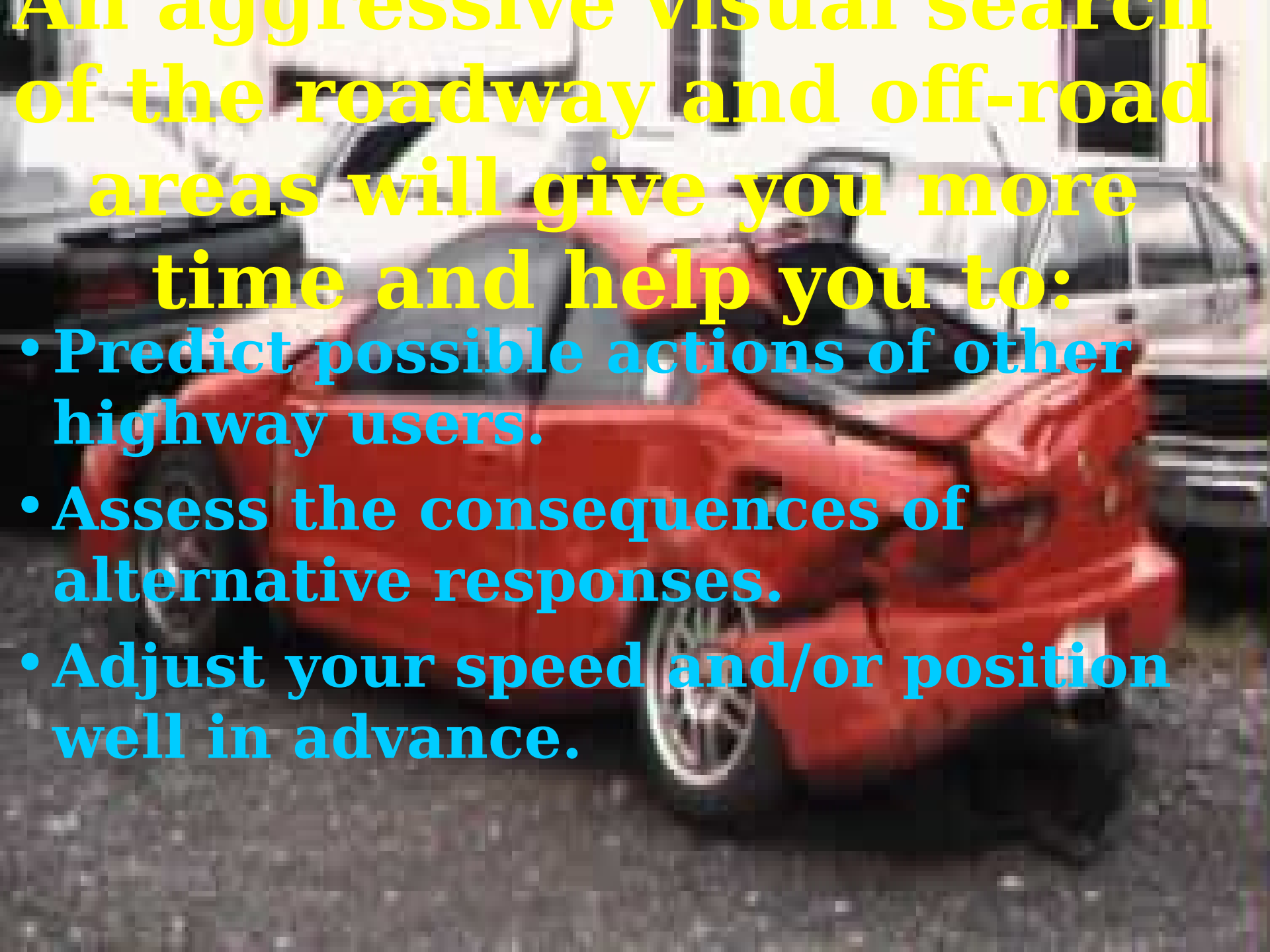
- **Managing risk starts with an aggressive visual search.**
 - **Don't try to do too many things at one time.**

A photograph of a red car on a road, with a large text overlay. The car is positioned in the center of the frame, facing away from the viewer. The road is paved and has a white line. In the background, there are trees and a building. The text is overlaid on the car and the road.

An aggressive visual search of the roadway and off-road areas will give you more time and help you to:

Achieve early awareness of other highway users. Identify an escape route if needed.

Determine how much

A red sports car, possibly a Ferrari, is shown in motion, blurred background. The car is in the foreground, and the background shows other vehicles and a building, all out of focus.

**All aggressive visual search
of the roadway and off-road
areas will give you more
time and help you to:**

- Predict possible actions of other highway users.**
- Assess the consequences of alternative responses.**
- Adjust your speed and/or position well in advance.**

Review

A blue sports car, possibly a Lotus Elise, is shown from a front-three-quarter view. A large, light blue airbag is deployed from the driver's side dashboard, partially obscuring the windshield and hood. The car is parked on a paved surface, and the background is slightly blurred.

- At what time is a young driver more likely to have a mishap?

Day

time.

Afternoon

Night

time.

Review

Managing risk starts with
?

**Checking traffic
flows.**

**Watching traffic signs/
lights.**

**Aggressive visual
search**

Review

- What's important to remember about actions of all roadway users?

They affect all other users.
They are unexpected.
They don't pay attention



Review

- In managing risk, a visual search will help you identify _____?

An escape route if
needed
A way to pass slower
traffic
Warning signs.

A photograph of two cyclists riding on a paved path. The cyclist on the left is a man wearing a white long-sleeved shirt, dark shorts, a white headband, and sunglasses. The cyclist on the right is a woman wearing a white short-sleeved shirt, dark shorts, a white visor, and sunglasses. Both are wearing large headphones. They are riding red bicycles. The background shows green grass and palm trees.

Listening

Devices

The wearing of portable headphones, earphones, or other listening devices while operating a motor vehicle or while jogging, walking, bicycling, roller blading or skating on roads and streets is

Driving

Regulations

**No person shall
operate ANY motor
vehicle without a
VALID state driver's
license in their
possession**

Regulations

- **SPEED**

- Vehicles must proceed at no more than the posted speeds, consistent with traffic and weather conditions, so as not to endanger pedestrians, if present, in the area or to hazard other personnel or vehicles.

Speed

- Young male drivers are the most likely to speed (Army statistics).
- Young drivers (**under 21**) who speed, also fail to wear safety belts.
- In 2002, **34 percent** of the fatal crashes had drivers (that's 13,025 people) that were not restrained.

Speed

(continued)

- The chance of death or serious injury doubles for every 10 miles per hour over 50 miles per hour that a vehicle travels.
- One mile per hour is approximately 1.5 feet per second. Therefore, a vehicle traveling 60 miles per hour is covering 90 feet per second.

Review



Who are the most likely to speed?

Young Male
Older
drivers
Young female
drivers.



Review



A vehicle traveling 60 miles per hour is covering how many feet per second?

60 feet per second.
90 feet per second.
120 feet per second.
180 feet per second.



Safety Belts and restraints

- In 2002, if every person driving had buckled up, an additional 16,567 deaths could have been prevented.
- **IT'S THE LAW.** ALL MILITARY PERSONNEL WILL WEAR SAFETY BELTS AT ALL TIMES (INCLUDING YOUR OWN VEHICLE) AS DIRECTED BY AR 385-55, Motor Vehicle Accident Prevention.

Headlights and you.

- IT'S the LAW.

- If you have your windshield wipers on for rain or snow you **MUST** have your headlights on.



Facts and figures



- The National Highway Traffic Safety Administration tallied the cost of motor vehicle accidents and the figure was **\$150 BILLION**.
- These were based on costs arising from crashes that killed **40,716 people**, and injured **5.2 million others**.

Review

Who is required to wear
safety belts?

EVERYONE.

ALL

**PASSANGERS.
DRIVER ONLY.**

The background of the slide is a collage of US currency. It features several coins, including a one-cent penny (Lincoln), a five-cent nickel (Jefferson), a ten-cent dime (Roosevelt), and a quarter (Washington). There are also portions of US dollar bills visible, including a \$20 bill and a \$100 bill. The text "General Information" is overlaid in a large, bold, orange font.

General Information

- Motor-vehicle crashes cost society more than **\$150.5 billion** each year.
- Personal and household crimes cost their victims **\$19 billion**.

General Information

- 75 percent of all crashes occur within 25 miles of home.
- 60 percent of crashes with deaths or injuries happen on roads with posted speed limits of 40 miles per hour or less.
- In 2002, 38,309 vehicle drivers died in crashes. That's an average of 105 deaths a day or one every 13 minutes.

5 25 '98

An aerial photograph of a dense urban skyline, likely New York City, featuring numerous skyscrapers and a body of water in the distance. The image is used as a background for a title slide.

Identification of high-risk highway conditions



**Changes in highway
conditions usually
create problems**

**Three Main
conditions of the
highway are critical:**

- Visibility
- Space
- Traction

Visibility

A vintage, rusted car is parked in a grassy field with trees in the background. The car is a dark color, possibly maroon or black, and shows significant rust and wear. The background consists of a line of green trees under a clear sky. The overall scene is outdoors and appears to be a rural or park setting.

- As a driver, you must have a clear field of vision to gather information and guide a motor vehicle effectively.
- Good driving visibility

Visibility

- It consists of your line of sight and field of view.
- Your field of view is the entire area of the highway and its surroundings that you can see at any given moment

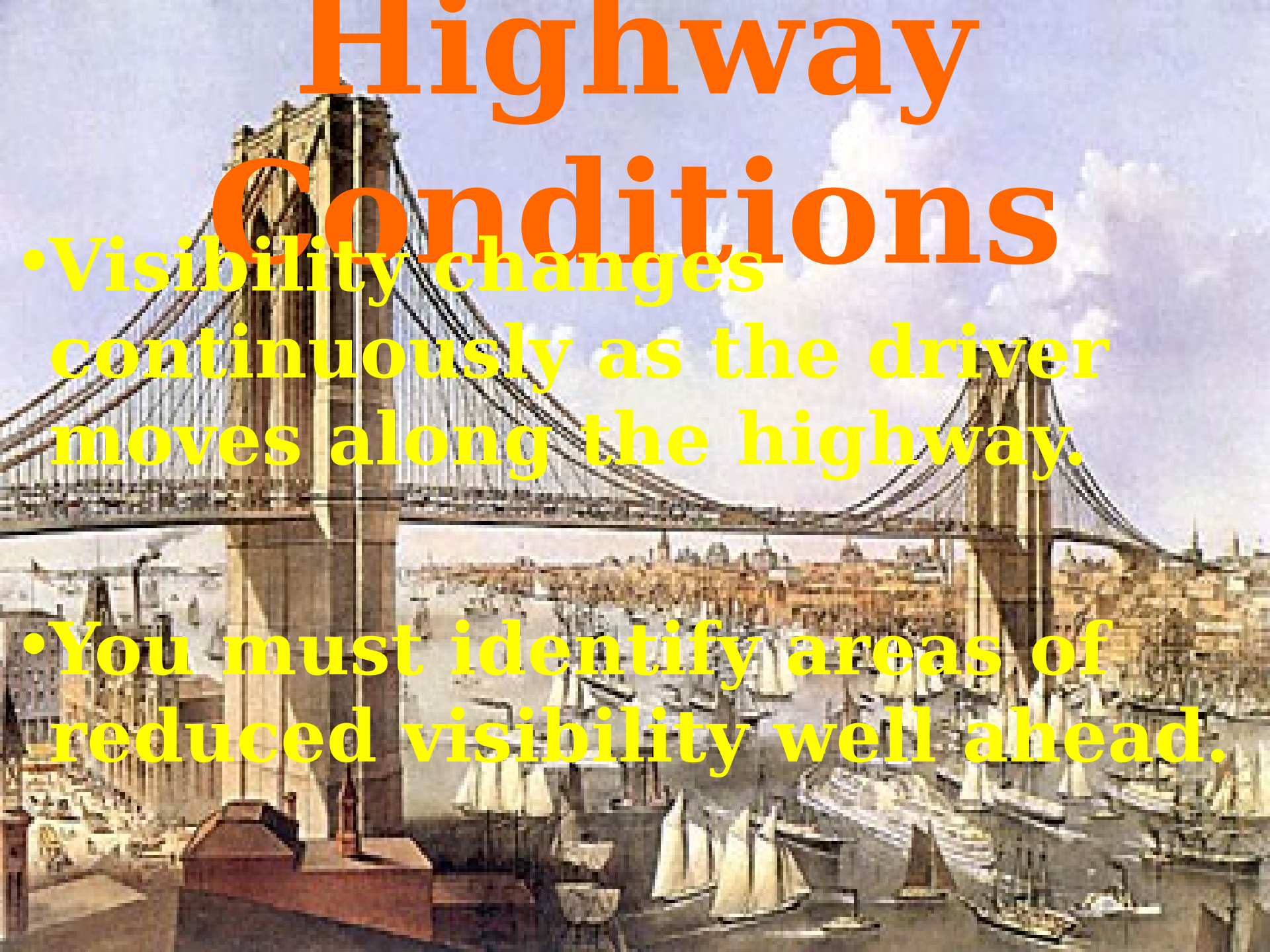
Visibility

- Line of sight is the imaginary line that extends from the drivers eyes to



Highway Conditions

- Visibility changes continuously as the driver moves along the highway.
- You must identify areas of reduced visibility well ahead.



Highway Conditions

- An area of reduced visibility is any highway area ahead where the sight distance and/or field of view is less than that required for safe travel at your current speed.



Conditions Off-road

- Conditions Off-road can also reduce your field of view to either side of your intended path of travel on a highway.





Some of the off-road conditions that can reduce your field of view:

- **Shrubbery**
- **Signs**
- **Buildings**
- **Parked Cars**
- **Actions happening off the highway**

Off-road Conditions

- Such obstacles not only prevent YOU from seeing, but could prevent OTHER drivers from seeing you.
- These situations are especially risky, hidden dangers can appear suddenly in your stopping zone.

A Reduced Field of VIEW may hide:

- Intersections
- Driveways
- Other vehicles
- Bicycles
- Joggers
- Pedestrians
- Children



Traffic Conditions

- Can reduce a drivers sight distance and visual lead time.
- Fixed or slow moving objects may come into view too late.
- Larger vehicles can also reduce your view of the path ahead.



Review

What are the three critical conditions of the highway?

**Control, attention & visibility.
Speed, lane use & distance.
Visibility, space & traction.**

Review

We know that good driving visibility depends on 2 things,

**No glare, good weather,
Line of sight, field of view.
Mirror adjustment,
clean windows.**

Review

**Which 2 conditions can
reduce a drivers
visibility ?**

Off-road and

traffic

Weather and

traction.

Vehicle and

maintenance



Your Driving Environm ent

The background of the slide is a photograph of the front of a white car. The hood is severely crumpled and bent upwards. The left headlight is shattered and broken. The right headlight is still intact but appears to be on or reflecting light. The car's front bumper is visible at the bottom. The text is overlaid on this image.

Examples that may affect your driving environment:

- **Bright Glare**
- **Sunglasses**
- **Driving at Night**
- **Driving at Dusk**
- **Bad Weather**

5 25 '98

Bright Glare

During daylight hours backgrounds, such as snow or sand, cause glare which sharply decreases your ability to see. Driving toward the sun can be a particular problem because your eyes adapt slowly to

SUNGLASSES!

**Keep sunglasses clean
and free of scratches.
Polaroid, neutral gray,
or green are rated the
best for reducing
glare.**

Driving at Night

Visibility problems associated with nighttime driving are the least understood. Aside from reduced details, darkness conceals many objects

Driving at night

No one can see as well at
night as during the

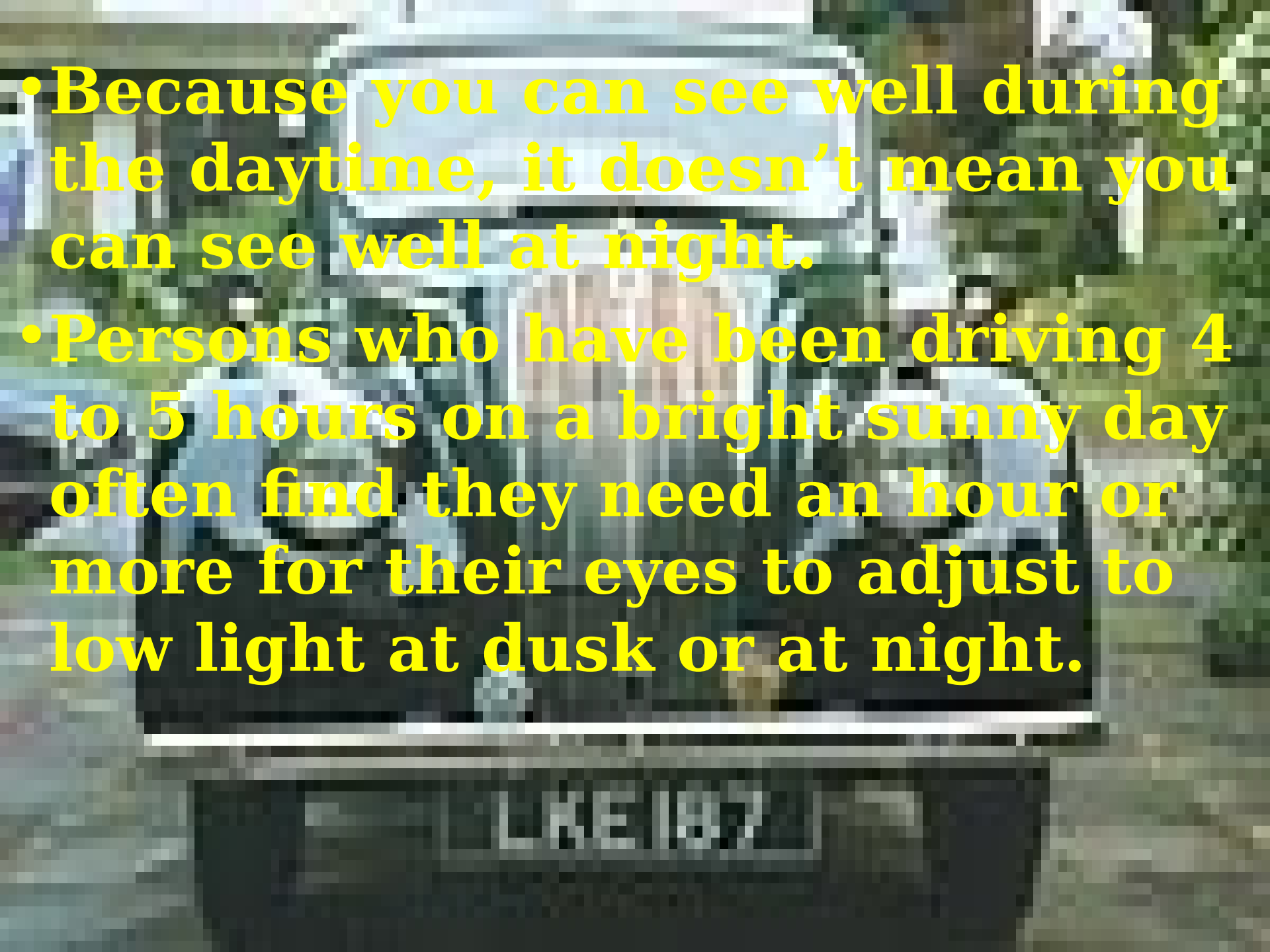
daytime. Your sight distance is limited
to the distance lighted by your
cars headlights. At night you
do not have the advantage of
color or contrast that you have
during daytime driving.

Night Vision

Three factors affect your night vision.

- Ability to see under conditions of low light.
- Ability to see against glare.
- Time needed to recover from exposure to bright light.



- 
- **Because you can see well during the daytime, it doesn't mean you can see well at night.**
 - **Persons who have been driving 4 to 5 hours on a bright sunny day often find they need an hour or more for their eyes to adjust to low light at dusk or at night.**

- 
- The background of the slide is a dark, blurry night photograph of a road. A white horizontal line, likely a road divider or edge line, runs across the middle of the image. Below this line, a dark rectangular sign with the text 'LANE 1A' in white capital letters is visible. The overall image is out of focus, emphasizing the text overlay.
- Some people simply CAN'T drive at night because of their inability to adjust to glare or low light.
 - Night driving also reduces your ability to see to the side.
 - Regardless of how good your headlights are, headlights don't adequately light off-road areas.

to minimize the problems of night driving:

- **Adjust your speed to compensate for reduced visibility.**
- **Keep your eyes moving. Don't focus on the middle of the lighted area.**
- **Use your high and low beams correctly.**
- **Avoid steady driving around your usual bedtime.**

to minimize the problems of night driving:

- Look to the sides of objects.
- Protect your eyes from glare.
- Keep windshields and headlights clean.
- Make it easier for others to see you.
- Use cars without tinted windshields.

Review.

- What can YOU do about bright glare?

Sunglasses.

Drive at night

only

driving

Review.

- These are two ways to minimize the effects of night driving:

Adjust your speed to compensate for reduced visibility.

Use your high or low beams correctly.

True.
False.

A white pickup truck is parked on a gravel lot. In the background, there is a building with a corrugated metal roof and some trees. The truck is a light-colored, possibly white or silver, and it's a full-size pickup. The text is overlaid on the image.

What may affect your driving environment?

- Bright Glare
- Sunglasses
- Driving at Night
- Driving at Dusk
- Bad Weather



Driving at Dusk

Be especially alert at dusk. The sky still is quite bright, but objects on the road can merge with shadows and fade into

Dad

Weather

Visual problems can occur during snowstorms or rain showers. If weather becomes too bad pull to the side of the road in a safe place, and

A photograph of a residential street during a rainstorm. The road is wet and reflects the surrounding environment. A faint rainbow is visible in the sky in the background. Several cars are parked along the sides of the street, and some houses with green lawns are visible. The overall atmosphere is overcast and damp.

**Drive with your
headlights on !!**

**Although not the law,
driving with your low-
beam headlights on
during daylight hours
makes you much more
visible to other drivers.**

Following Distance

- For safe movement forward, a vehicle must have a clear path equal to the minimum stopping zone for the speed traveled.

Allow a Safe interval

- Space allows you time to stop safely if other drivers brake suddenly.

A GENERAL RULE IS:

- With good visibility and a safe alternate path of travel, allow a 2 to 3 second interval when you follow another vehicle on dry pavement.

Traction

The listed variables can effect your adhesion with the road:

- **Types of surfaces:**
 - **Concrete**
 - **Blacktop**
 - **Brick**
 - **Dirt**
 - **Gravel**
 - **Sand on hard surface**

Traction

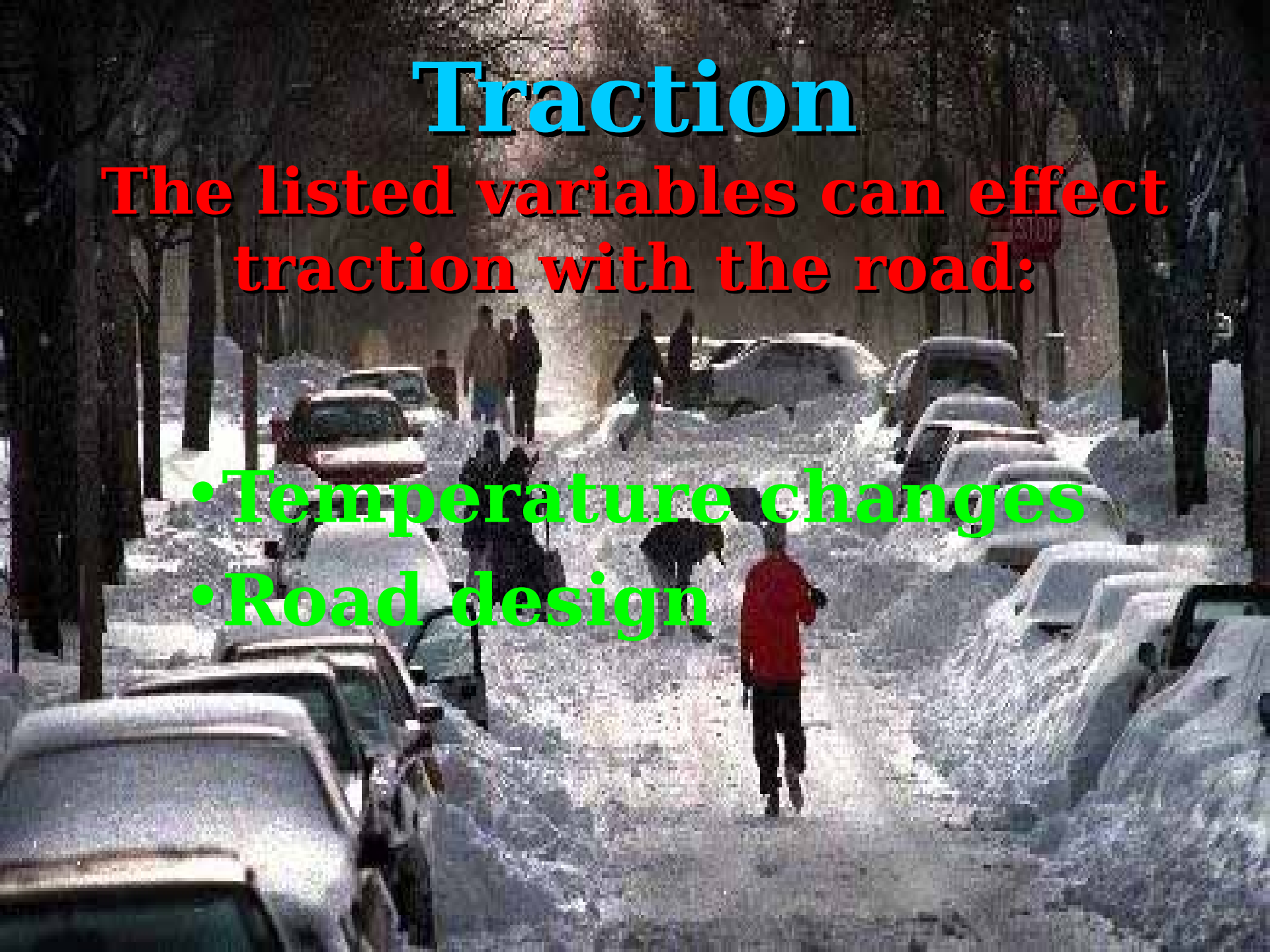
The listed variables can effect your traction with the road:

- **Surface conditions:**
 - **Water**
 - **Snow**
 - **Ice & BLACK ICE**
 - **Dirt**
 - **Oil from cars**

Traction

The listed variables can effect traction with the road:

- Temperature changes
- Road design



Review.

- How many seconds is needed for a safe following distance?

2 to 3
seconds.

4 to 6

seconds.

3 to 4

Review.

- If you can't see, you should pull to the side of the road at a safe place and wait for the weather to clear.

True.

False

Seat belt

myths

- How many of these myths have you heard ?
 - I don't need a safety belt when I'm traveling at low speeds or going on a short trip.

More than 80 percent of all motor vehicle crashes occur at speeds less than 40 MPH and within 25 miles from home.

Seat belt myths

- How many of these myths have you heard ?
 - I'm uncomfortable and too confined when I wear a safety belt.

Safety belts are designed to allow you to reach necessary driving controls. The newer shoulder belt retractors give you even

Seat belt myths

- How many of these myths have you heard ?
 - I might be saved if I'm thrown clear of a car in a crash.

The fact is that your chances of being killed are **FOUR** times greater if you're thrown from a car



BOTTOM

LINE

**ALWAYS WEAR
YOUR SEAT BELT**

**“IT’S THE
LAW”**

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